INPLASY PROTOCOL

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Support: **No support.**

Review Stage at time of this submission: **Preliminary searches.**

Conflicts of interest: **None.**

Optimal Dose of Perineural Dexmedetomidine to Prolong Analgesia After Brachial Plexus Blockade: A Systematic Review and Meta-Analysis of 57 Randomized Clinical Trials

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Review question / Objective: **Optimal Dose of Perineural Dexmedetomidine to Prolong Analgesia After Brachial Plexus Blockade in patients suffering from upper limb surgery.**
Condition being studied: **Analgesia After Brachial Plexus Blockade.**
Information sources: **Embase, PubMed, and The Cochrane Library.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 January 2021 and was last updated on 17 January 2021 (registration number INPLASY202110066).

INTRODUCTION

Review question / Objective: **Optimal Dose of Perineural Dexmedetomidine to Prolong Analgesia After Brachial Plexus Blockade in patients suffering from upper limb surgery.**

Condition being studied: **Analgesia After Brachial Plexus Blockade.**

METHODS

Participant or population: **Patients suffering from upper limb surgery.**

Intervention: **Perineural dexmedetomidine with local anesthetic.**

Comparator: **Local anesthetic alone.**

Study designs to be included: Only RCTs.

Eligibility criteria: (1) only RCTs; (2) comparison between perineural dexmedetomidine with local anesthetic and only local anesthetic in single-injection brachial plexus block for upper limb surgery; (3) adult patients; and (4) in English.

Information sources: Embase, PubMed, and The Cochrane Library.

Main outcome(s): Duration of analgesia.

Additional outcome(s): Visual analog scale (VAS) in 12 and 24 hours, consumption of analgesics in 24 hours, and adverse events.

Quality assessment / Risk of bias analysis: Review manager 5.4.

Strategy of data synthesis: Data used mean differences (MDs) and risk differences (RDs), presented as 95% confidence intervals (CIs).

Subgroup analysis: Subgroup analyses were used to assess the impact of nerve localization technique, dexmedetomidine dosage and LA types.

Sensibility analysis: No.

Language: English.

Country(ies) involved: China.

Keywords: perineural dexmedetomidine; adjuvant; brachial plexus block; meta-analysis.

Contributions of each author:
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